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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/003,850	11/02/2001	Sreekumar Pillai	J6673(C)	6359
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EXAMINER

KANTAMNENI, SHOBHA

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,850

Applicant(s)

PILLAI ET AL.

Examiner

Shobha Kantamneni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) NONE is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1, 2, 5-6, and 9-10 are pending.

This Office Action is a response to Applicant's amendment and response filed on 05/16/05, wherein claim 1 has been amended, and new claims 9-10 have been added

On further consideration, and in view of new ground(s) of rejection, the rejection of claims 1-2, and 5-6 under 35 U.S.C. 103(a) as being unpatentable over Suares et al. (US 5,914,116) in view of Pillai et al. (US 6,548,072) made in the previous office action dated 02/23/2005 is herein withdrawn.

Claims 1, 2, 5-6, and 9-10 are examined herein.

The following new ground(s) of rejections are made.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 6, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granger et al. (US 5,723,139, PTO-892) and Pillai et al. (US 6,548,072, PTO-892), in view of Liu et al. (5,976,555, PTO-892), and Surares et al. (US 5,941,116, PTO-1449 of record).

Granger et al. teach a skin conditioning composition comprising a compound selected from retinal or retinyl ester in an amount from about 0.001 % to about 10 %, in combination with a retinoid booster, polycyclic triterpene carboxylic acid, glycyrrhetic

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acid in an amount from about 0.0001 % to about 50%. See column 1, line 42-column 3, line 39. It is further taught that the combination of retinal or a retinyl ester with a polycyclic triterpine carboxylic acid, glycyrrhetic results in synergistic inhibition of keratinocyte differentiation. Retinoid boosters such as linoleic acid, arachidonic acid etc. are also disclosed as optional ingredients in the composition. See column 4, lines 29-38. The composition is applied to the skin for treating a skin conditions such as dry skin, photodamaged skin, appearance of wrinkles, age spots, acne, skin lightening etc. See column 12, claims 1-6. Granger et al. further disclose that the skin care composition therein is stored in a suitable container to form a skin care product. See column 11, EXAMPLE 6-7.

Granger et al. do not teach the presence of phytoestrogens in the composition.

Granger et al. do not teach the storage of first composition comprising retinoid, and second composition comprising retinoid booster, phytoestrogens, in separate compartments joined together.

Pillai et al. US 6,548,072 teach Skin care compositions containing 5 % w/w of CHICK PEA Extract, and 0.01 % w/w of Linoleic acid for improving the appearance of wrinkled, dry, flaky or aged skin. See abstract, column 12, EXAMPLE 10. Pillai teaches that Organic chick pea extracts contain phytoestrogens such as genistein, formononetin, daidzein, biochanin A etc., and are useful in improving appearance of wrinkled, lined, dry, flaky, aged or photodamaged skin. See column 2, lines 24-27.

Liu et al. teach that retinoids such as retinal, retinyl ester in skin care compositions are unstable due to oxidation or isomerization to non-efficacious chemical

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forms with the result that the amount of retinoid actually present to provide the beneficial effects is reduced in a short period of time. See column 2, lines 40-55. It is further taught that several stable compositions for skin care are supplied in two bottles (separating retinoids from other cosmetic ingredients), portions of which are mixed together just prior to use. See column 2, lines 54-62.

Suares et al teach skin care formulations employing a dual container system for multi composition use. Those formulation taught by Suares et al employ retinoid compositions useful for anti-wrinkle dermal application. See column 3, Table I; column 4, lines 59-64; TABLE III, column 8, and TABLE IV, column 9. Suares also teach anti-wrinkle composition containing retinoid and cleanser containing phytoestrogen, Genistein in separate compositions. See TABLE III, column 8, and TABLE IV, column 9. Suares et al. further disclose that the first and second compositions are stored in respectively separate containers, being joined together (see abstract and Fig. 1-2).

From the teachings of Pillai, it would have been obvious to a person of ordinary skill in the art at the time of invention to add phytoestrogens such as daidzein, formononetin or genistein to the compositions of Granger et al. since phytoestrogens are used to treat skin conditions such as dry, flaky, wrinkled, photodamaged skin. It is generally considered a prima facie obvious to combine compounds each of which are taught by the prior art to be useful for the same purpose, in order to form a composition, which is used for the very same purpose. The idea of combining them flows logically from their having been used individually in the prior art. As shown by recited teachings of Granger, and Pillai et al., the instant claims contain two compounds retinoids and

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phytoestrogens used for improvement of skin appearance. *In re kirkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

It would have been obvious to a person of ordinary skill in the art at the time of invention to employ a two compartment system for separately storing retinal or retinyl ester in a first composition, and retinoid boosters such as glycyrrretinic acid, linoleic acid, phosphatidylcholine and phytoestrogens in the second composition.

One having ordinary skill in the art would have been motivated at the time of invention to employ two compartments to separately store retinol or retinyl ester, and retinoid booster glycyrrretinic acid and phytoestrogens because Liu et al. teach that the skin compositions containing retinol or retinyl esters are unstable as they quickly lose their activity by, for example, either being oxidized or isomerizing to non-efficacious chemical forms and chemical degradation.

Moreover, several known stable skin care compositions containing retinol or retinyl esters are known to be supplied in two bottles or two portions to separate retinoids from other cosmetic ingredients to keep retinoids from chemical reactions with other ingredients (the first and second compositions are known to be stored in respectively separate compartments or containers, being joined together) and are mixed together just prior to use and based on the teachings of Liu and Soares.

Therefore, one of ordinary skill in the art would have found it obvious to employ two compartments for separately storing retinol or retinyl ester in a first composition and retinoid boosters, phytoestrogens in the second composition to keep retinol or retinyl ester from reacting with retinoid boosters and phytoestrogens in order to preserve the

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stability of retinoids in the compositions to avoid chemical degradation, and keep retinoids from chemical reactions with other ingredients to avoid chemical degradation. Thus, the teachings of Liu in particular and Soares et al. have clearly provided the motivation to employ the separate compartments herein.

Claims 1, 2, 5, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granger et al. (US 5,723,139, PTO-892), Pillai et al. (US 6,548,072, PTO-892), and Meybeck (FR 2 777 179; PTO-892) in view of Liu et al. (5,976,555, PTO-892), and Soares et al. (US 5,941,116, PTO-1449 of record).

Granger et al. , and Pillai et al. are as discussed above.

Granger et al. do not teach the presence of phosphatidylcholine in the composition.

Granger et al. do not teach the storage of first composition comprising retinoid, and second composition comprising retinoid boosters, phytoestrogens, in separate compartments joined together.

Meybeck et al. teach cosmetic and skin care compositions comprising retinoid, retinoid boosters such as 22-29 % of phosphatidyl choline, 0.1 % of glycyrrhetic acid. These compositions can be used for treating skin conditions such as acne, dry skin, etc.. See page 3, lines 24-27; pages 8-9, Examples 1-2.; page 13, Example 11.

From the teachings of Meybeck et al., it would have been obvious to a person of ordinary skill in the art at the time of invention to add retinoid booster, phosphatidyl choline to the compositions of the Granger et al., since phosphatidyl choline is used to treat skin conditions such as dry skin, aged skin, acne etc. From the teachings of Pillai,

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it would have been obvious to a person of ordinary skill in the art at the time of invention to add phytoestrogens such as daidzein, formononetin or genistein to the compositions of Granger et al. since phytoestrogens are used to treat skin conditions such as dry, flaky, wrinkled, photodamaged skin. It is generally considered a prima facie obvious to combine compounds each of which are taught by the prior art to be useful for the same purpose, in order to form a composition, which is used for the very same purpose. The idea of combining them flows logically from their having been used individually in the prior art. As shown by recited teachings of Granger, Pillai, and Meybeck et al., the instant claims contain compounds such as retinoids, phosphatidyl choline, glycyrrhetic acid and phytoestrogens used for improvement of skin appearance. *In re kirkhoven*, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

It would have been obvious to a person of ordinary skill in the art at the time of invention to employ a two compartment system for separately storing retinal or retinyl ester in a first composition, and retinoid boosters such as glycyrrhetic acid, linoleic acid, phosphatidylcholine and phytoestrogens in the second composition.

One having ordinary skill in the art would have been motivated at the time of invention to employ two compartments to separately store retinol or retinyl ester, and retinoid booster glycyrrhetic acid and phytoestrogens because Liu et al. teach that the skin compositions containing retinol or retinyl esters are unstable as they quickly lose their activity by, for example, either being oxidized or isomerizing to non-efficacious chemical forms and chemical degradation.

Moreover, several known stable skin care compositions containing retinol or retinyl esters are known to be supplied in two bottles or two portions to separate retinoids from other cosmetic ingredients to keep retinoids from chemical reactions with other ingredients (the first and second compositions are known to be stored in respectively separate compartments or containers, being joined together) and are mixed together just prior to use and based on the teachings of Liu and Soares.

Therefore, one of ordinary skill in the art would have found it obvious to employ two compartments for separately storing retinol or retinyl ester in a first composition and retinoid boosters, phytoestrogens in the second composition to keep retinol or retinyl ester from reacting with retinoid boosters and phytoestrogens in order to preserve the stability of retinoids in the compositions to avoid chemical degradation, and keep retinoids from chemical reactions with other ingredients to avoid chemical degradation. Thus, the teachings of Liu in particular and Soares et al. have clearly provided the motivation to employ the separate compartments herein.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shobha Kantamneni whose telephone number is 571-272-2930. The examiner can normally be reached on Monday-Friday, 8am-5pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shobha Kantamneni
Patent Examiner
Art Unit :1617*


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PRIMARY EXAMINER